

LISTING OF THE CLAIMS

The following listing of claims replaces all prior claim listings and versions in the application:

1. (Currently Amended) An electromagnetic noise suppressor comprising:
a base material containing a binding agent, the base material comprising a surface; and
a composite layer comprising the binding agent that is a part of the base material and a magnetic material integrated with each other and comprising a crystal portion made of nanometer scale crystals of atoms of the magnetic material disposed at a spacing of several angstroms in a crystal lattice, a binding agent portion including the binding agent without the nanometer scale crystals of the atoms of the magnetic material, and a dispersed portion comprising atoms of the magnetic material dispersed without crystallizing in the binding agent;

the composite layer formed by an application of the magnetic material to the surface of the base material by physical vapor deposition with particle energy in a range from 5 eV to 1000 eV,

wherein surface resistivity of the composite layer is in a range from 1×10^1 to 1×10^{10}

Ω/\square ; and

the composite layer has a thickness in a range from 0.005 μm to 0.3 μm .

2. (Canceled)
3. (Original) The electromagnetic noise suppressor according to claim 1, wherein maximum transmission attenuation of electromagnetic radiation per unit thickness of the composite layer is in a range from -0.5 to -500 dB/ μm .
4. (Original) The electromagnetic noise suppressor according to claim 3, wherein maximum transmission attenuation of electromagnetic radiation is in a range from -10 to -50 dB.

5. (Previously Presented) The electromagnetic noise suppressor according to claim 3, wherein maximum reflection attenuation at the frequency where maximum transmission attenuation of electromagnetic radiation is achieved is in a range from -6 to -50 dB.
6. (Original) The electromagnetic noise suppressor according to claim 1, wherein power loss at 1 GHz is in a range from 0.3 to 0.65.

Claims 7-10 (Canceled)

11. (Previously Presented) The electromagnetic noise suppressor according to claim 1, wherein specific gravity of the composite layer, the base material and a support material combined is in a range from 0.9 to 1.5.
12. (Original) An electromagnetic noise suppressor comprising a plurality of the electromagnetic noise suppressors of claim 1 stacked one on another.
13. (Original) The electromagnetic noise suppressor according to claim 1, wherein the binding agent is a resin or a rubber.
14. (Previously Presented) The electromagnetic noise suppressor according to claim 1, wherein the binding agent is a hardening resin.
15. (Previously Presented) The electromagnetic noise suppressor according to claim 1, wherein elastic modulus in shear of the binding agent is in a range from 1×10^4 to 1×10^{10} Pa.
16. (Previously Presented) The electromagnetic noise suppressor according to claim 1, wherein elastic modulus in shear of the binding agent is in a range from 1×10^4 to 5×10^7 Pa.
17. (Original) The electromagnetic noise suppressor according to claim 1, further comprising: a heat conduction layer containing a thermally conductive filler.

18. (Original) The electromagnetic noise suppressor according to claim 1, further comprising: a support layer.
19. (Original) The electromagnetic noise suppressor according to claim 1, wherein the base material contains a non-halogen and non-antimony flame retarding agent.
20. (Original) The electromagnetic noise suppressor according to claim 1, further comprising: a flame retarding resin layer.
21. (Original) The electromagnetic noise suppressor according to claim 1, wherein the base material contains an electrically conductive filler.
22. (Previously Presented) The electromagnetic noise suppressor according to claim 21, wherein the electrically conductive filler is at least one kind of electrically conductive fine powder selected from a group consisting of metal powder, metal fiber, metal-coated fine particles, fine carbon particles and carbon nano-tube.
23. (Original) The electromagnetic noise suppressor according to claim 1, further comprising: an electrically conductive layer.
24. (Previously Presented) The electromagnetic noise suppressor according to claim 23, wherein the electrically conductive layer is at least one kind selected from a group consisting of metal foil, fabric of metal fibers, fabric of electrically conductive fibers, interlaced metal wires, interlaced electrically conductive fibers, organic polymer layer containing an electrically conductive filling agent dispersed therein and electrically conductive film.
25. (Original) The electromagnetic noise suppressor according to claim 24, wherein the electrically conductive film comprises a support film and a metal layer having a thickness from 5 to 500 nm formed by physical deposition of a metal on the support film.

26. (Original) The electromagnetic noise suppressor according to claim 25, wherein the metal layer is formed by opposing target type magnetron sputtering process.
27. (Original) The electromagnetic noise suppressor according to claim 1, wherein the base material contains a dielectric material powder.
28. (Previously Presented) The electromagnetic noise suppressor according to claim 27, wherein the dielectric material powder is at least one kind selected from a group consisting of barium titanate-based ceramic, zirconium titanate-based ceramic and lead perovskite-based ceramic.
29. (Withdrawn) A method of manufacturing an electromagnetic noise suppressor, which comprising:
a vapor deposition process of physically vapor-depositing a magnetic material onto the surface of a base material containing a binding agent to form a composite layer on the surface of the base material.
30. (Withdrawn) The method of manufacturing an electromagnetic noise suppressor according to claim 29, wherein the magnetic material is deposited on the surface of the base material containing the binding agent by physical vapor deposition of opposing target type magnetron sputtering process.
31. (Withdrawn) The method of manufacturing the electromagnetic noise suppressor according to claim 29, wherein the magnetic material is deposited on the surface of the base material containing the binding agent by physical vapor deposition with particle energy of 5 to 1000 eV.
32. (Withdrawn) The method of manufacturing the electromagnetic noise suppressor according to claim 29, wherein the amount of the magnetic material deposited is in a range from 0.5 to 200 nm in terms of equivalent thickness of the magnetic material film.

33. (Withdrawn) A method of manufacturing an electromagnetic noise suppressor, which comprises:

a stack fabricating process of fabricating a stack by stacking other layers on a base material containing a binding agent, and

a vapor deposition process of physically vapor-depositing a magnetic material onto the surface of the base material containing a binding agent to form a composite layer on the surface of the base material.

34. (Withdrawn) An article with an electromagnetic noise suppressing function wherein at least a part of the surface of the article is covered by the electromagnetic noise suppressor of claim 1.

35. (Withdrawn) The article with an electromagnetic noise suppressing function of claim 34, wherein the article is an electronic component.

36. (Withdrawn) The article with an electromagnetic noise suppressing function according to claim 34, wherein the article is a printed wiring board on which electronic components are mounted.

37. (Withdrawn) The article with an electromagnetic noise suppressing function according to claim 36, wherein the printed wiring board is a flexible printed wiring board.

38. (Withdrawn) The article with an electromagnetic noise suppressing function according to claim 34, wherein the article is an electric connector.

39. (Withdrawn) The article with an electromagnetic noise suppressing function according to claim 38, wherein the electric connector is a flexible connector.

40. (Withdrawn) The article with an electromagnetic noise suppressing function according to claim 34, wherein the article is a flat cable.

41. (Withdrawn) The article with an electromagnetic noise suppressing function according to claim 34, wherein the article is a key top member for pushbutton switch.
42. (Withdrawn) The article with an electromagnetic noise suppressing function according to claim 34, wherein the article is an insert sheet for a preform.
43. (Withdrawn) The article with an electromagnetic noise suppressing function according to claim 34, wherein the article is a semiconductor integrated circuit.
44. (Withdrawn) A method of manufacturing an article with an electromagnetic noise suppressing function, which comprises:
- a coating process of coating at least a part of the article with a base material containing a binding agent, and
 - a vapor deposition process of physically vapor-depositing a magnetic material onto the surface of a base material containing a binding agent to form a composite layer on the surface of the base material
45. (Previously Presented) The electromagnetic noise suppressor according to claim 1, wherein the particle energy is in a range from 5 eV to 100 eV.